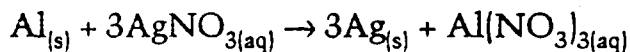
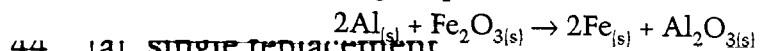
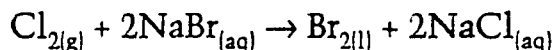


42. (a) single replacement  
copper + silver nitrate  $\rightarrow$  silver + copper (II) nitrate  
(b) double replacement (precipitation)  
potassium iodide + silver nitrate  $\rightarrow$  silver iodide + potassium nitrate  
(c) single replacement  
 $\text{Cl}_{2(g)} + 2\text{NaBr}_{(aq)} \rightarrow \text{Br}_{2(l)} + 2\text{NaCl}_{(aq)}$   
(d) double replacement (neutralization)  
 $\text{H}_2\text{SO}_{4(aq)} + 2\text{NaOH}_{(aq)} \rightarrow 2\text{HOH}_{(l)} + \text{Na}_2\text{SO}_{4(aq)}$   
(e) double replacement (precipitation)  
 $3\text{Ca}(\text{NO}_3)_{2(aq)} + 2\text{Na}_3\text{PO}_{4(aq)} \rightarrow \text{Ca}_3(\text{PO}_4)_{2(s)} + 6\text{NaNO}_{3(aq)}$   
(f) single replacement



(c) single replacement



(d) single replacement

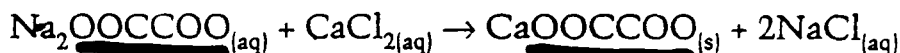
zinc + sulfuric acid  $\rightarrow$  hydrogen + zinc sulfate

(e) double replacement (precipitation)

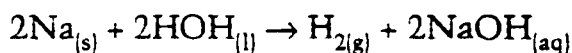
aqueous silver nitrate + aqueous magnesium chloride

$\rightarrow$  solid silver chloride + aqueous magnesium nitrate

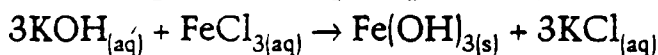
(f) double replacement (precipitation)



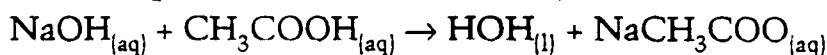
(g) single replacement



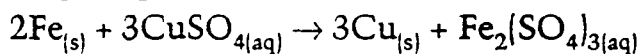
(h) double replacement (precipitation)



(i) double replacement (neutralization)



(j) single replacement



(k) Two moles of solid iron and three moles of aqueous copper (II) sulfate react to produce three moles of solid copper and one mole of aqueous iron (III) sulfate.

(l) 2:3

45. Replication: The scientific community requires that the claims of the individual members of the community be published so the empirical work can be repeated.

#44 Good Rev.

